Medical
Wahro
copy 2

CONTENTS OF VOLUME 128

No. 1, April, 1939

PAGE

Reineke, E. P., Peterson, V. E., and Turner, C. W. The partition of the serum globulins of the dairy goat 1
Goettsch, Marianne, Lonstein, Ida, and Hutchinson, John J. Muscle phosphorus in nutritional muscular dystrophy in rabbits .. 9
Frost, D. V., and Elvehjem, C. A. Factor W and its relation to the vitamin B complex 23
Jukes, Thomas H. Experiments with the filtrate factor 35
McHenry, E. W., and Gavin, Gertrude. The B vitamins and fat metabolism. II. The effect of thiamine upon the synthesis of body fat in pigeons 45
Ball, Eric G. Xanthine oxidase: purification and properties 51
Poo, L. J., Lew, W., and Addis, T. Protein anabolism of organs and tissues during pregnancy and lactation 69
Bernheim, Frederick, and Bernheim, Mary L. C. Note on the action of manganese and some other metals on the oxidation of certain substances by liver 79
Fevold, H. L. Chemical differences of the follicle-stimulating and luteinizing hormones of the pituitary 83
Hess, W. C., and Sullivan, M. X. The cystine content of deaminized proteins 93
Orten, James M., and Smith, Arthur H. On the site of the formation of citric acid in the animal organism 101
Cohn, David J., Tannenbaum, Albert, Thalhimer, William, and Hastings, A. Baird. Influence of oxygen and carbon dioxide on the blood of normal and pneumonic dogs 109
Eichelberger, Lillian. The distribution of body water in skeletal muscle in dogs with impaired renal function 137
Flock, Eunice V., Hester, Harold R., and Bollman, Jesse L. Phospholipid changes during the production of fatty livers in geese 153
Schneider, H., and Steenbock, H. A low phosphorus diet and the response of rats to vitamin D_2 159
Gray, J. S., Ivy, A. C., and Cuthbert, F. P. The conversion of protein to glucose in depancreatized and phlorhizinized dogs 173
Block, Richard J. The composition of keratins. The amino acid composition of hair, wool, horn, and other eukeratins 181
Embree, Norris D. The occurrence of cyclized vitamin A in fish liver oils 187

STEKOL, JAKOB A. Studies on the mercapturic acid synthesis in animals. XI. The detoxication of benzyl chloride, benzyl alcohol, benzaldehyde, and S-benzylhomocysteine in the rabbit and rat.... 199

KIES, MARIAN WOOD, DYER, HELEN M., WOOD, JOHN L., and DU VIGNEAUD, VINCENT. A study of the utilization of the optical isomers of N,N'-dimethylcystine..... 207

BERGMANN, MAX, and STEIN, WILLIAM H. A new principle for the determination of amino acids, and its application to collagen and gelatin..... 217

GREENSTEIN, JESSE P. Sulfhydryl groups in proteins. II. Edestin, excelsin, and globin in solutions of guanidine hydrochloride, urea, and their derivatives..... 233

GREENSTEIN, JESSE P. Studies of multivalent amino acids and peptides. XI. The synthesis of diglycyl-*l*-cystine..... 241

GREENSTEIN, JESSE P., and KLEMPERER, FRIEDRICH W. Aspartylhistidine..... 245

HORECKER, B. L., STOTZ, ELMER, and HOGNESS, T. R. The promoting effect of aluminum, chromium, and the rare earths in the succinic dehydrogenase-cytochrome system..... 251

ECK, JOHN C., and THOMAS, BYRON H. The chemical activation of sterols. V. A study of the relationship between chemical activation and configuration of various sterols and derivatives..... 257

ECK, JOHN C., and THOMAS, BYRON H. The chemical activation of sterols. VI. A study of various reagents in chemical activation and in sterol color reactions..... 267

RATISH, HERMAN D., BULLOWA, JESSE G. M., AMES, JAMES B., and SCUDI, JOHN V. Urinary excretion products of sulfanilyl-2-aminopyridine..... 279

WINTER, IRWIN C. Fat metabolism following liver injury. Decreased iodine number of tissue fatty acids of male rats following carbon tetrachloride administration..... 283

BERNHART, F. W. Denaturation and molecular splitting of egg albumin by ultraviolet radiant energy..... 289

FENN, W. O. The deposition of potassium and phosphate with glycogen in rat livers..... 297

WILDE, W. S. The distribution of potassium in the cat after intravascular injection..... 309

MEYER, KARL, SMYTH, ELIZABETH M., and DAWSON, MARTIN H. The isolation of a mucopolysaccharide from synovial fluid..... 319

ROE, JOSEPH H., and HALL, JAMES M. The vitamin C content of human urine and its determination through the 2,4-dinitrophenylhydrazine derivative of dehydroascorbic acid..... 329

BEACH, ELIOT F., ERICKSON, BETTY NIMS, BERNSTEIN, SAMUEL S., WILLIAMS, HAROLD H., and MACY, ICIE G. The amino acid composition of erythrocyte posthemolytic residue of five mammalian species..... 339

NEURATH, HANS, and SAUM, ARTHUR M. The denaturation of serum albumin. Diffusion and viscosity measurements of serum albumin in the presence of urea 347
GUERRANT, RALPH E., and HOGAN, ALBERT G. Effect of amino acids on anemia caused by deaminized casein 363
TREADWELL, C. R., and ECKSTEIN, H. C. The composition of the tissue lipids of the Virginia white-tailed deer (*Odocoileus virginianus borealis*) 373
ADLERSBERG, DAVID, and ELLENBERG, MAX. Effect of carbohydrate and fat in the diet on uric acid excretion 379

No. 2, MAY, 1939

MONTGOMERY, M. L., ENTENMAN, C., and CHAIKOFF, I. L. The liver lipids of dogs subjected to ligation of the external pancreatic ducts 387
TOENNIES, GERRIT, and KOLB, JOSEPH J. Methionine studies. II. *dl*-Methionine sulfoxide 399
TWEEDY, WILBUR R., TEMPLETON, R. D., PATRAS, MARY C., MCJUNKIN, F. A., and MCNAMARA, E. W. Studies on the effects of calciferol in the thyroparathyroidectomized-nephrectomized rat .. 407
MAIN, EDNA R., and SHINN, LAWRANCE E. The determination of hydrogen peroxide in bacterial cultures 417
CARR, C. JELLEFF, and FORMAN, SYLVAN E. Sugar alcohols. XX. The fate of *d*-sorbitol, styracitol, and *l*-sorbose in the animal body 425
JACOBS, WALTER A., and CRAIG, LYMAN C. Delphinine. II. On oxodelphinine 431
JACOBS, WALTER A., ELDERFIELD, ROBERT C., and CRAIG, LYMAN C. The aconite alkaloids. II. The formula of oxonitine 439
GREEN, LOWELL F., MCCARTHY, JAMES F., and KING, C. G. Inhibition of respiration and photosynthesis in *Chlorella pyrenoidosa* by organic compounds that inhibit copper catalysis 447
MCCARTHY, JAMES F., GREEN, LOWELL F., and KING, C. G. The substrate specificity and inhibition characteristics of two copper-protein "oxidases" 455
BAER, ERICH, and FISCHER, HERMANN O. L. Studies on acetone-glyceraldehyde. IV. Preparation of *d*(+)-acetone glycerol 463
BAER, ERICH, and FISCHER, HERMANN O. L. Studies on acetone-glyceraldehyde. V. Synthesis of optically active glycerides from *d*(+)-acetone glycerol 475
BAER, ERICH, and FISCHER, HERMANN O. L. Studies on acetone-glyceraldehyde. VI. Synthesis of the biological *l*(−)-α-glycerophosphoric acid 491
KOHLER, G. O., ELVEHJEM, C. A., and HART, E. B. The relation of pyrrole-containing pigments to hemoglobin synthesis 501
WEBB, T. J., and KNIAZUK, MICHAEL. Spectrophotometric examination of blood from animals receiving sulfanilamide 511

GURIN, SAMUEL, BACHMAN, CARL, and WILSON, D. WRIGHT. The gonadotropic hormone of urine of pregnancy. I. A simple method of extraction and purification 525
BRATTON, A. CALVIN, and MARSHALL, E. K., JR. A new coupling component for sulfanilamide determination 537
EDER, HOWARD, BRADLEY, H. C., and BELFER, SAMUEL. The survival of cathepsin in autolysis 551
GOERNER, ALFRED, and GOERNER, M. MARGARET. Vitamin A and liver cell tumors 559
MCCARTHY, EARL F., and VAN SLYKE, DONALD D. Diurnal variations of hemoglobin in the blood of normal men 567
HOWELL, STACEY F. The determination of the urea in chicken blood .. 573
CHARGAFF, ERWIN. Unstable isotopes. I. The determination of radioactive isotopes in organic material 579
CHARGAFF, ERWIN. Unstable isotopes. II. The relative speed of formation of lecithin and cephalin in the body 587
ROBERTS, RICHARD G. Some reactions of ammonolyzed insulin 597
RITTENBERG, D., SCHOENHEIMER, RUDOLF, and KESTON, ALBERT S. Studies in protein metabolism. IX. The utilization of ammonia by normal rats on a stock diet 603
TIPSON, R. STUART, CHRISTMAN, CLARENCE C., and LEVENE, P. A. The structure of the aldobionic acid from flaxseed mucilage 609
JELLINEK, E. MORTON, and LOONEY, JOSEPH M. Statistics of some biochemical variables on healthy men in the age range of twenty to forty-five years 621
JONES, H. B., CHAIKOFF, I. L., and LAWRENCE, JOHN H. Radioactive phosphorus as an indicator of phospholipid metabolism. VI. The phospholipid metabolism of neoplastic tissues (mammary carcinoma, lymphoma, lymphosarcoma, Sarcoma 180) 631
LONGENECKER, HERBERT E. Deposition and utilization of fatty acids. I. Fat synthesis from high carbohydrate and high protein diets in fasted rats 645
KLEIN, J. R. Effect of thyroid feeding and thyroidectomy on the oxidation of amino acids by rat kidney and liver 659
VIRTUE, ROBERT W., and DOSTER-VIRTUE, MILDRED E. Studies on the production of taurocholic acid in the dog. IV. Cysteine, homocysteine, and thioglycolic acid 665

No. 3, JUNE, 1939

JOSEPH, MICHAEL, COHN, WALDO E., and GREENBERG, DAVID M. Studies in mineral metabolism with the aid of artificial radioactive isotopes. II. Absorption, distribution, and excretion of potassium 673
VICKERY, HUBERT BRADFORD, and PUCHER, GEORGE W. The loss of carbon from excised rhubarb leaves during culture 685
VICKERY, HUBERT BRADFORD, and PUCHER, GEORGE W. The metabolism of amides in green plants. III. The mechanism of amide synthesis 703

JACOBS, WALTER A., and CRAIG, LYMAN C. The ergot alkaloids. XVII. The dimethylindole from dihydrolysergic acid 715
KNUDSON, ARTHUR, STURGES, STUART, and BRYAN, W. RAY. Cholesterol content of skin, blood, and tumor tissue in rats irradiated with ultraviolet light 721
WYCKOFF, RALPH W. G. The ultracentrifugal analysis of the latent mosaic virus protein 729
PERLMAN, I., and CHAIKOFF, I. L. Radioactive phosphorus as an indicator of phospholipid metabolism. VII. The influence of cholesterol upon phospholipid turnover in the liver 735
NORDBÖ, R. The concentration of ionized magnesium and calcium in milk 745
LANGSTROTH, G. O., and TALBOT, N. B. The absorption spectra of the compounds formed by androsterone and testosterone in the *m*-dinitrobenzene reaction 759
PROCEEDINGS OF THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS iii
INDEX TO VOLUME 128 775